Before the
Federal Communications Commission
Washington, D.C. 20554

WT Docket No. 95-47

In the Matter of

Amendment of Part 95 of the Commission's Rules to allow Interactive Video and Data Service licensees to provide mobile service to subscribers	RM-8476

NOTICE OF PROPOSED RULE MAKING

Adopted: April 13, 1995; Released: May 5, 1995

Comment Date: June 26, 1995
Reply Comment Date: July 11, 1995

By the Commission:

I. INTRODUCTION

1. In this *Notice of Proposed Rule Making* (*Notice*), we propose to amend Part 95 of the rules (47 C.F.R. Part 95) to allow Interactive Video and Data Service (IVDS) licensees to provide mobile service to subscribers on an ancillary basis. This proceeding was initiated by a petition for rule making (Petition), RM-8476, filed by EON Corporation (EON), on May 11, 1994.[1]

II. BACKGROUND

2. The IVDS is a point-to-multipoint, multipoint-to-point, short distance communications service. IVDS licensees may provide information, products, or services to individual subscribers located at fixed locations within a service area, and subscribers may provide responses.[2] Under our current rules,[3] IVDS is classified as a fixed service. Accordingly, mobile operation of response transmitter units (RTUs) is not permitted.[4] The IVDS service rules were adopted in 1992 in GEN Docket No. 91-2.[5]

III. PETITION

3. In its petition, EON states that after the IVDS service rules were adopted,[6] it designed refinements[7] and a nationwide communications network capable of providing a variety of additional services to subscribers. Specifically, EON states that it has refined its technology and redesigned its system to use passive receive-only microcells which will relay the received RTU signal to the base station network via land lines. According to EON, the most significant benefit of this refinement is that the maximum transmitter power of all EON RTUs can be reduced to 100 milliwatts ERP.[8] EON argues that these refinements "eliminat[e] the need for the subscriber to remain near his or her television set or within an enclosure" to obtain service[9] and permits IVDS licensees to provide cost-effective mobile service.

4. Allowing low power mobile operation, according to EON, would benefit both IVDS licensees and consumers. It would permit IVDS licensees to provide new and innovative communication services.[10] EON states that services such as confirming a child's safety, or sending an electronic "come home now" message, will be possible.[11] Further, EON argues that consumers would benefit from lower costs[12] and increased access to IVDS systems.[13] EON contends that allowing mobile operation would "enhance the appeal and usefulness of IVDS to subscribers and ensure that the spectrum which the Commission has allocated for IVDS will be used to the fullest possible extent."[14]

5. EON states that, in addition to allowing improved service for both IVDS licensees and consumers, its new approach to IVDS will benefit broadcasters.[15] EON requests that we authorize mobile RTUs to transmit with a maximum effective radiated power (ERP) of only 100 milliwatts, compared to a maximum power of 20 watts currently authorized for fixed IVDS. EON contends that operating its system at this lower power will further reduce the interference potential to television channel 13. Further, EON argues that allowing mobile operation will increase the opportunity for broadcasters to provide valuable new services to consumers.[16]

6. Maximum Service Television, Inc., (MSTV) filed comments in support of EON's petition stating that it is satisfied that authorizing a low-power mobile capability will not increase the potential for interference to television reception, provided the existing regulatory safeguards are re-

---

[1] *See* Public Notice released May 19, 1994, Report No. 2011.

[2] Service offerings are determined by the licensee. Examples of service offerings that licensees could offer include opportunities for real-time responses to polls, educational or pay-per-view programming, and commercial data applications such as transmission of database information to point-of-sale terminals, home banking or downloading of data to personal computers, VCRs, or other consumer electronic products.

[3] 47 C.F.R. §§ 95.803(a), 95.805(e).

[4] An RTU is the transmitter used by a subscriber to interact with the IVDS system. Our current rules permit RTUs to operate inside a subscriber's residence, office or other fixed location and the RTUs need not be physically attached to a television set or computer.

[5] *Report and Order* in Gen Docket No. 91-2, 7 FCC Rcd 1630 (1992).

[6] EON petition at 1, 4.

[7] *Id.* at 5.

[8] Our rules permit RTUs to transmit with a maximum power of 20 watts.

[9] EON petition at 7.

[10] *Id.*

[11] *Id.*

[12] *Id.* at 10. Specifically, EON states that the manufacturing costs of RTUs are expected to decrease due to the low power requirements. Consequently, the retail price of RTUs should be reduced.

[13] *Id.* at 7.

[14] *Id.* at 7-8.

[15] *Id.* at 7.

[16] *Id.* at 9.

tained. Radio Telecom and Technology, Inc. (RTT) and ITV, Inc. (ITV) also filed comments in response to EON's petition. RTT argues that EON's proposal raises serious questions about the basic technical nature, interference potential, and ultimate use of IVDS. Further, it contends that the Commission should decide this matter pursuant to a notice-and-comment rule making proceeding. RTT also states that any power limits on IVDS mobile operation should be in terms of average power rather than peak power, because average power more accurately depicts interference potential.[17] ITV supports EON's petition, but notes that if mobile operation is allowed, the Commission will need to determine whether to regulate IVDS as a commercial mobile radio service. EON filed reply comments reiterating the benefits of mobile operation and noting support from MSTV.

IV. DISCUSSION

7. The Commission's primary objective in creating the IVDS was to satisfy demands for interactive communications between subscribers at fixed locations (*e.g.,* homes or offices) and video, data, or other service providers. Nonetheless, we believe that allowing IVDS licensees to use excess capacity to provide limited mobile services will enhance economic and spectrum efficiency, without impairing the purpose of the service. In addition, allowing IVDS licensees to provide ancillary mobile services would enhance telecommunication service offerings for consumers, producers, and new entrants, and encourage rapid deployment and growth of IVDS services.[18] Further, it would facilitate public access to telecommunication services. Finally, because of the low RTU power, mobile use is not anticipated to increase the interference potential to TV channel 13 reception.[19]

8. Therefore, we propose to amend Section 95.803(b) of the rules to permit IVDS licensees to provide ancillary mobile services to fixed service subscribers within their service area. We propose to permit transmissions from a cell transmitter station (CTS) to a fixed or mobile RTU and vice versa at any location within the service area. The primary use of the IVDS system, however, must be to provide subscribers at fixed locations with the capability to interact with video, data or other service providers. The offering to subscribers of mobile service only, such as paging or dispatch services, would not be permitted. Mobile service could be offered only to fixed service subscribers. As suggested by EON, we propose to limit the ERP of RTUs designed to operate as portables to 100 milliwatts. We specifically request comments regarding this proposed power limitation. We also request comments on the need to continue to authorize 20 watts power for fixed RTUs, given their apparent ability to operate at 100 milliwatts. With regard to this issue, we request comment on whether systems designed for mobile use by companies other than EON could have all RTUs--fixed and mobile--operate at 100 milliwatts.

9. Further, we propose to apply to mobile RTUs the existing 5-seconds-per-hour duty cycle limitation, as proposed by MSTV, to protect reception of TV channel 13. This limitation would effectively preclude IVDS from abandoning interactive communications. It appears that permitting ancillary mobile services would not result in IVDS licensees providing mobile services such as personal communications service.

10. In light of the above, we ask commenters to address specifically whether any restrictions should be placed on the types of ancillary mobile services that IVDS licensees would be permitted to offer. In responding to this issue, commenters should consider the rule specifying the maximum duty cycle of each RTU. *See* 47 C.F.R. § 95.863. For example, should allowing mobile RTU operations mean only that we are permitting subscribers at itinerant locations to access information, products or services or should we permit mobile-RTU-to-mobile-RTU communications through a cell transmitter station? Under this approach, the CTS would act merely as a "bent pipe" or "mobile relay." One RTU could page or send a message to another RTU without any interaction with a service provider. We propose to permit such indirect RTU-to-RTU interaction. Direct RTU to RTU transmissions would, however, remain prohibited.[20]

11. We recognize that the changes proposed herein follow completion of the first IVDS auction, pursuant to which 574 IVDS licenses were assigned. These licenses were auctioned subject to existing rules limiting their use to fixed operations. The public interest requires, however, that we retain the discretion and the responsibility to modify our service rules as the industry continues to evolve. The auction was the procedure we used to assign licenses among mutually exclusive applicants.[21]

12. In a separate Petition for Clarification, EON requests that we clarify that IVDS licensees can offer consumers the use of low power, mobile RTUs on a secondary, non-interference basis, pending the outcome of its petition for rule making.[22] EON states that there is precedent for allowing such secondary use when such use does not displace or interfere with the primary use of the spectrum and when it increases spectrum efficiency.[23] EON contends that adding mobility will enhance the appeal of IVDS to consumers, thereby generating additional revenues and cash flow and, as a result, help businesses meet build-out requirements.[24] RTT filed comments on EON's petition for clarification. RTT states that it does not object to mobile RTU operation if the issues are carefully considered in a rule making proceeding.[25] As we stated earlier, IVDS is a fixed service and mobile operation currently is not permitted, even on a secondary basis. We believe this issue must be decided through the rule making process, and have, therefore, initiated this present proceeding.

---

[17] RTT comments at 2.

[18] This in turn will encourage economic and job growth.

[19] TV channel 13 operates in the lower adjacent band (210-216 MHz). Section 95.861 of the Commission's rules, 47 C.F.R. § 95.861, provides that IVDS systems must not cause harmful interference to television channel 13 reception.

[20] *See* 47 C.F.R. § 95.805(c).

[21] *See* Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387 (1993)(Budget Act); *see also* H.R. Conf. Rep. No. 213, 103d Cong., 1st Sess. 480-89 (1993), *reprinted in* 1993 U.S. Code Cong. & Admin. News 1169-78.

[22] Petition for Clarification filed by EON on June 21, 1994.

[23] *Id.* at 2.

[24] *Id.* at 4.

[25] RTT comments at 1.

V. PROCEDURAL MATTERS

Ex Parte Rules - Non-Restricted Proceeding

13. This is a non-restricted notice and comment rule making proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's Rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

Regulatory Flexibility Act

14. An initial Regulatory Flexibility Analysis is contained in Appendix A.

15. The Secretary shall send a copy of this *Notice of Proposed Rule Making*, including the Analysis in Appendix A, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612 (1981).

Comment Dates

16. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments on or before **June 26, 1995** and reply comments on or before **July 11, 1995**. To file formally in this proceeding, you must file an original and five copies of all comments and reply comments. To file informally, you must file an original and one copy of your comments, provided only that the Docket Number is specified in the heading. You should send comments and reply comments to: Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street N.W., Washington, D.C. 20554.

Ordering Clause

17. Authority for issuance of this *Notice* is contained in Sections 4(i), 303(b), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(b) and 303(r).

Further Information

18. For further information, contact Bill Cross or Donna Kanin at the Wireless Telecommunications Bureau, Private Radio Division (202) 418-0680.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

Attachments

APPENDIX A

Initial Regulatory Flexibility Analysis

Reason for Action

The Commission proposes to amend Part 95 of its rules to allow ancillary portable operation in the Interactive Video and Data Service (IVDS). This change will allow IVDS licensees to provide new and innovative communication services and promote more efficient and flexible use of IVDS spectrum.

Objectives

The proposed rules will encourage rapid deployment and growth of IVDS systems and enhance telecommunications offerings for consumers, producers and new entrants.

Legal Basis

The proposed action is authorized under Sections 4(i), 303(r) and 307(c) of the Communications Act, 47 U.S.C. §§ 154(i), 303(r) and 307(c).

Report, Recordkeeping and Other Compliance Requirements

None.

Federal Rules Which Overlap, Duplicate or Conflict With These Rules

None.

Description, Potential Impact, and Small Entities Involved

The proposed rule change would benefit IVDS licensees by allowing them to provide new services. Most IVDS licensees are expected to be small entities.

Any Significant Alternatives Minimizing the Impact on Small Entities Consistent with the Stated Objectives

None.

APPENDIX B

Part 95 of Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

Part 95-Personal Radio Services

1. The authority citation for Part 95 would continue to read as follows:

Authority citation: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. §§ 154, 303.

2. Section 95.803 is amended to read as follows:

§ 95.803 IVDS description.

(a) An IVDS system is a point-to-multipoint, multipoint-to-point, short distance communications service for its licensees to provide information, products, or services to, and allow interactive responses from, subscribers in the

licensee's service area. In addition to fixed operations, IVDS licensees may provide ancillary mobile services to fixed service subscribers.

(b) The components of each IVDS system are its administrative apparatus, its response transmitter units (RTUs), and one or more cell transmitter stations (CTSs). RTUs may be used in any location within the service area. Each IVDS system is authorized for a specific service area and frequency segment. There can be a maximum of two IVDS systems per service area. There are two frequency segments available for each service area.

* * * * *

3. Section 95.805 is amended by revising paragraphs (c) and (e) to read as follows:

§ 95.805 Permissible communications.

* * * * *

(c) Direct RTU-to-RTU communications are prohibited. No RTU in an IVDS system may be interconnected with the public switched noetwork or any commercial mobile radio service.

(d)***

(e) An IVDS system may provide service to RTUs at any location within its service area.

* * * * *

4. Section 95.855 is amended by revising paragraph (a) to read as follows:

§ 95.855 Transmitter effective radiated power limitation.

(a) The effective radiated power (ERP) of each CTS and RTU shall be limited to the minimum necessary for successful communications. RTUs must incorporate automatic power control to ensure the minimum ERP is used. No CTS may transmit with an ERP exceeding 20 watts. No RTU that is designed to be used at a fixed location may transmit with an ERP exceeding 20 watts. No RTU that is designed to be used at itinerant locations may transmit with an ERP exceeding 100 milliwatts.

* * * * *